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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/764,140

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Hing C. Wong

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05/16/2006

FOLEY HOAG, LLP
PATENT GROUP, WORLD TRADE CENTER WEST
155 SEAPORT BLVD
BOSTON, MA 02110

EXAMINER

BORGEEST, CHRISTINA M

ART UNIT

PAPER NUMBER

1649

DATE MAILED: 05/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/764,140

Applicant(s)

WONG ET AL.

Examiner

Christina Borgeest

Art Unit

1649

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 37-55 is/are pending in the application.
- 4a) Of the above claim(s) 43, 45 and 46 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 37-42, 44 and 47-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/3/05; 1/23/06.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election of SEQ ID NO: 4 in the reply filed on 23 March 2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 1-36 are canceled. Claims 37-55 are pending. Claim 44 is amended. Claims 43, 45 and 46 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 23 March 2006.

Claims 37-42, 44, 47-55 are under consideration.

Information Disclosure Statement

The information disclosure statement filed 10/3/2005 and 1/23/2006 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered. Many of the citations listed on the 1449 forms submitted by Applicant did not have the accompanying reference, thus not all references could be considered. In addition, the examiner could not locate most of the references in prior filed applications 10/293,417; 09/293,854 or 08/814,806. In addition, the IDS fails to comply with 37 CFR

Art Unit: 1649

1.98(a)(3) because it does not include a concise explanation of the relevance of Japanese Patent no: 1-503438, which is not in the English language, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information. It has been placed in the application file, but the information referred to therein has not been considered.

Priority

Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 119(e) as follows:

The later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (the parent or original nonprovisional application or provisional application). The disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994).

The disclosure of the prior-filed application, Application No. 10/293,417, fails to provide adequate support or enablement in the manner provided by the first paragraph of 35 U.S.C. 112 for one or more claims of this application. The '417 application does not provide enablement or written description for ***treatment of sepsis*** with the claimed antibodies, thus the effective filing date for the application is 22 January 2004.

Claim Objections

Claim 44 is objected to because of the following informalities: it depends from withdrawn claim 43. Appropriate correction is required.

Claim Rejections - 35 USC § 112, second paragraph

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 37 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 37 recites the limitation "wherein the Factor X or Factor IX binding to the complex is inhibited..." There is insufficient antecedent basis for "the complex" in the claim.

Claim Rejections - 35 USC § 112, first paragraph

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 37-42, 44, 47-55 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for treating septic shock syndrome in a mammal comprising administering to the mammal the antibody having a sequence represented by SEQ ID NO: 4, does not reasonably provide enablement for preventing septic shock syndrome or treatment with other antibodies. The specification does not

Art Unit: 1649

enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims. There are many factors to be considered when determining whether there is sufficient evidence to support a determination that a disclosure does not satisfy the enablement requirement and whether any necessary experimentation is "undue." (See *In re Wands*, 858 F.2d 731, 737, 8 USPQ2d 1400, 1404 Fed. Cir. 1988) These factors include, but are not limited to: (a) the breadth of the claims; (b) the nature of the invention; (c) the state of the prior art; (d) the level of one of ordinary skill; (e) the level of predictability in the art; (f) the amount of direction provided by the inventor; (g) the existence of working examples; and (h) the quantity of experimentation needed to make or use the invention based on the content of the disclosure.

The generic claim 37, and claims 38-42, 44 and 47-55, which depend on claim 37 is drawn in part to "preventing septic shock syndrome". The plain English meaning of the word prevention implies 100% success at stopping an event from occurring. The claimed methods do not achieve this goal. Septic shock is the results from bacteria in the blood followed by a pro-inflammatory response and is the 11th most common cause of death in the United States (see p. 672, left column, first paragraph of Rangel-Frausto, 2005, Archives of Medical Research. 36: 672-681). In addition, the incidence is increasing due to immunocompromised patients, invasive medical procedures or devices, anti-biotic resistance, and greater life-sustaining technology that keeps more patients at the "extremes of life," (Rangel-Frausto, p. 672, 2nd – 3rd paragraphs).

Prevention of septic shock would encompass tackling all the societal and medical issues listed above that lead to the development in the first place.

Therapeutics inhibit symptoms, mechanism and/or the onset of disease, but do not prevent all pathological events from occurring. The use of the word “preventing” in the claims implies that not a single pro-inflammatory event will occur as a result of the administration of the antibody. According to Rangel-Frausto, traditional markers for diagnosis of septic shock are not sufficiently sensitive (p. 675, 3rd paragraph). The first event of the pro-inflammatory cascade is thought to be endotoxin liberation (Rangel-Frausto, p. 673, 3rd paragraph), and in order to be 100% effective at preventing septic shock, administration of the antibody would have to block that event from occurring.

The working example (example 9) demonstrates that infusion with the antibody led to a greatly increased average survival time, 111 hours vs. 16 hours with saline (since there was only an n=2, no statistical significance can be attributed to the finding).

Nevertheless, though the results are promising, the data do not demonstrate prevention of septic shock syndrome. The prior art is silent with respect to 100% prevention of every pathological event occurring during the course of a disease or disability after administration of a medicament designed to treat that particular disease or disability. A possible exception is the administration of vitamins to prevent vitamin related deficiencies from occurring, although some deficiencies can occur, even in the cases of supplementation.

Furthermore, while the specification is enabled for treating septic shock syndrome in a mammal comprising administering to the mammal the antibody having a sequence represented by SEQ ID NO: 4, it does not reasonably provide enablement for the treatment of septic shock syndrome with antibodies other than the antibody having a sequence represented by SEQ ID NO: 4. The claims are extremely broad; the claims encompass treatment with any antibody that binds to any epitope of native human tissue factor. The phrase in claim 37, "does not substantially bind non-native tissue factor," is a negative recitation of function and does not effectively limit the claimed invention. Generally, although methods of treatment with antibodies are known in the art, there is some degree of unpredictability in the effectiveness of therapeutic antibodies. Booy et al. review the history of antibodies as therapeutics in Arch Immunol. Ther. Exp., 2006, 54, 85-101. Although Booy et al. are writing about cancer therapies, many of the observations made about antibodies can be generalized for treatment of other disorders with antibodies. For instance, early antibody therapeutics, raised in mouse, rabbit or rat generated immune responses in the recipient, leading to quick clearance or even anaphylaxis (see Booy et al., p. 86, right column, 2nd paragraph). To avoid this problem, humanized antibodies were developed, however, attempts to raise monoclonal antibodies in humans have not been successful for the most part (see p. 94, right column, 3rd paragraph). Hybrid or humanized antibodies diminish immune responses, however, it is thought they would be immunogenic in immunocompetent humans (see p. 95). More specifically, although there is at least one report of success in the treatment of septic shock with anti-TF antibodies in an animal model (see for

Art Unit: 1649

instance, Taylor, Crit Care Med. 2001, 29(7 Suppl): S78-89, cited below), however, as noted in the article by Booy et al., antibodies that are not human or humanized would likely provoke an immune response in a human patient. With the exception of claim 44, which recites "the antibody comprising a sequence represented by SEQ ID NO: 4", there is no recitation in the claims other than the SEQ ID NO: 4, of where on tissue factor the antibody is supposed to bind.

Due to the large quantity of experimentation necessary to determine the epitopes on native tissue factor where the recited antibody must bind and to establish a protocol for the prevention of septic shock, the lack of direction/guidance presented in the specification regarding and the absence of working examples directed to the same, the complex nature of the invention (antibody therapeutics and 100% prevention), the unpredictability of antibody therapy and prevention in the prior art (see Booy et al. and Rangel-Frausto, respectively), and the breadth of the claims which fail to recite limitations on the epitopes the recited antibody must bind, undue experimentation would be required of the skilled artisan to make and/or use the claimed invention in its full scope.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 1649

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 37-42, 44, 47-55 are rejected under 35 U.S.C. 103(a) as being obvious over Wong et al. (WO 98/40408, published 17 September 1998) in view of Taylor (Crit Care Med. 2001, 29(7 Suppl): S78-89). The instant claims are drawn to a method for treating or preventing septic shock syndrome in a human patient, the method comprising administering to a human patient an effective amount of an antibody that binds native human tissue factor and does not substantially bind non-native tissue factor, wherein the Factor X or Factor IX binding to the complex is inhibited by at least about 80, 90 or 95 percent and the administration is sufficient to prevent or treat septic shock syndrome in human patient, wherein the antibody has the binding specificity for native human tissue factor about equal to or greater than H36.D2.B7 [ATCC HB-12255], and is a monoclonal antibody, a chimeric antibody, a humanized antibody, a humanized chimeric antibody, an immunologically active antibody fragment, a Fab, F(v), Fab' or F(ab)₂ fragment or a single chain antibody, wherein the antibody comprises a constant

Art Unit: 1649

region of human origin and/or human variable regions and/or comprises a sequence represented by SEQ ID NO: 4. Wong et al. teach a method of administering to a human patient an effective amount of an antibody that binds native human tissue factor and does not substantially bind non-native tissue factor (see p. 3, lines 22-25; p. 4, lines 21), wherein the Factor X or Factor IX binding to the complex is inhibited by at least about 80, 90 or 95 percent (see p. 23, lines 27-31), wherein the antibody has the binding specificity for native human tissue factor about equal to or greater than H36.D2.B7 [ATCC HB-12255] p. 3, lines 23-25), and is a monoclonal antibody (p. 3, line 18), a chimeric antibody (p. 12, lines 6-15), a humanized antibody (p. 12, lines 6-15), a humanized chimeric antibody (p. 12, lines 6-15), an immunologically active antibody fragment (p. 13, lines 17-29), a Fab, F(v), Fab' or F(ab)₂ fragment or a single chain antibody (p. 13, lines 17-29), wherein the antibody comprises a constant region of human origin and/or human variable regions and/or comprises a sequence represented by SEQ ID NO: 4 (p. 12, lines 6-15; p. 13, lines 17-29; p. 30, SEQ ID NO: 4).

Wong et al. do not teach the administration of the claimed antibodies for the purpose of treating septic shock syndrome. Taylor teach at p. S82 whole page, that treatment with anti TF antibody in a primate model for septic shock syndrome attenuated response to otherwise lethal *E. coli* injection (see esp. middle column and right column). It would have been obvious to the person of ordinary skill in the art at the time the invention was made to modify the teachings of Wong et al. by treating septic shock syndrome, as taught in Taylor because of the success Taylor reported in the treatment of septic shock. The person of ordinary skill in the art would have been

Art Unit: 1649

motivated to combine the teachings and could have expected success for the same reason. Furthermore, since the antibodies taught by Wong et al. meet all the functional limitations of claim 1, (an antibody that binds native tissue factor and does not bind non-native tissue factor, wherein Factor X binding to the complex is inhibited), the ability to treat sepsis is inherent in the compositions taught by Wong et al. Thus the claims do not contribute anything non-obvious over the prior art.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Please note that Applicants' have submitted numerous patent applications and/or have many issued patents on similar subject matter that necessitated the review of numerous applications and patent documents. Applicants have a duty to disclose

applications and patent documents with claims reciting the same scope as the instant application. The examiner has identified Double Patenting rejections over a representative sample of applications and patent documents below. Other possible conflicts should be identified by Applicant.

Claims 37, 38, 40, 41, 42, 47, 48, 49, 50 and 51 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 32, 34, 35, 38, 46, 47 and 48 of copending Application No. 10/310,113 in view of Taylor (cited above). The instant claims are drawn to a method for treating or preventing septic shock syndrome in a mammal, the method comprising administering to a mammal an effective amount of a monoclonal antibody that binds native human tissue factor and does not substantially bind non-native tissue factor, wherein the Factor X or Factor IX binding to the complex is inhibited and the administration is sufficient to prevent or treat septic shock syndrome in human patient, wherein the antibody has the binding specificity for native human tissue factor about equal to or greater than H36.D2.B7 [ATCC HB-12255], wherein the antibody is a chimeric antibody, a humanized antibody, a humanized chimeric antibody, a single chain antibody, an immunologically active antibody fragment, a Fab, F(v), Fab' or F(ab)₂ fragment and wherein the antibody comprises human variable regions. The claims of the '113 application are drawn to a method of administering to a mammal a sufficient amount of antibody that binds human tissue factor and inhibits the binding of factor X, wherein the antibody is obtained from cell line H36.D2.B7 deposited as ATCC HB-12255, wherein the antibody is a chimeric antibody, a humanized antibody, a single chain antibody, a

Art Unit: 1649

humanized chimeric antibody, a Fab, F(v), Fab' or F(ab)₂ fragment and wherein the antibody comprises human variable regions. The claims of the '113 application do not teach the administration of the claimed antibodies for the purpose of treating septic shock syndrome. Taylor teach at p. S82, whole page that treatment with anti TF antibody in a primate model for septic shock syndrome attenuated response to otherwise lethal *E. coli* injection (see esp. middle column and right column). It would have been obvious to the person of ordinary skill in the art at the time the invention was made to modify the claims of '113 application by adding a limitation for treating septic shock syndrome, as taught in Taylor because of the success Taylor reported in the treatment of septic shock. The person of ordinary skill in the art would have been motivated to combine the teachings and could have expected success for the same reason. Furthermore, since the antibodies recited in the '113 application are the same as those recited in the instant application, it would be expected that they would be capable of acting in the same way to treat septic shock syndrome.

This is a provisional obviousness-type double patenting rejection.

Claims 37, 38, 39, 40, 41, 42, 44, 47, 50 51, 52, 53 and 54 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 37, 38, 39, 40, 41, 42, 43, 44, 45, 48, 53, 54, 55 and 57 of copending Application No. 10/618,338 in view of Taylor (cited above). The instant claims are drawn to a method for treating or preventing septic shock syndrome in a mammal, the method comprising administering to the mammal an effective amount of a

Art Unit: 1649

monoclonal antibody that binds native human tissue factor and does not substantially bind non-native tissue factor, wherein the Factor X or Factor IX binding to the complex is inhibited by at least about 80, 90 or 95 percent in a standard in vitro binding assay and wherein the antibody has the binding specificity for native human tissue factor about equal to or greater than H36.D2.B7 [ATCC HB-12255], wherein the antibody is a chimeric antibody, a single chain antibody, an immunologically active antibody fragment, wherein the fragment is a Fab, F(v), Fab' or F(ab)₂ fragment, a humanized antibody and/or comprises a constant region of human origin and wherein the antibody comprises a sequence represented by SEQ ID NO:4. The claims of the '338 application are also drawn to methods comprising administering to the mammal an effective amount of a monoclonal antibody that binds native human tissue factor and does not substantially bind non-native tissue factor, wherein the Factor X or Factor IX binding to the complex is inhibited by at least about 80, 90 or 95 percent in a standard in vitro binding assay and wherein the antibody has the binding specificity for native human tissue factor about equal to or greater than H36.D2.B7 [ATCC HB-12255], wherein the antibody is a chimeric antibody, a single chain antibody, an immunologically active antibody fragment, wherein the fragment is a Fab, F(v), Fab' or F(ab)₂ fragment, a humanized antibody and/or comprises a constant region of human origin and wherein the antibody comprises a sequence represented by SEQ ID NO:4. The claims of the '338 application do not teach the administration of the claimed antibodies for the purpose of treating septic shock syndrome. Taylor teaches that treatment with anti TF antibody in a primate model for septic shock syndrome attenuated response to

Art Unit: 1649

otherwise lethal *E. coli* injection (see esp. middle column and right column). It would have been obvious to the person of ordinary skill in the art at the time the invention was made to modify the claims of '338 application by adding a limitation for treating septic shock syndrome, as taught in Taylor because of the success Taylor reported in the treatment of septic shock. The person of ordinary skill in the art would have been motivated to combine the teachings and could have expected success for the same reason. Furthermore, since the antibodies recited in the '338 application are the same as those recited in the instant application, it would be expected that they would be capable of acting in the same way to treat septic shock syndrome.

This is a provisional obviousness-type double patenting rejection.

Claim 37 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 25, 26, 27 and 33 of copending Application No. 11/087,528 in view of Taylor (cited above). The claim of the instant application is drawn to a method for treating septic shock syndrome in a mammal, the method comprising administering to the mammal an effective amount of an antibody that binds native human tissue factor and does not substantially bind non-native tissue factor, wherein the Factor X or Factor IX binding to the complex is inhibited and the administration is sufficient to prevent or treat the septic shock syndrome in the mammal. The claims of the '528 application are drawn to methods of administering to the mammal an effective amount of an antibody that binds native human tissue factor and does not substantially bind non-native tissue factor, wherein the Factor X or Factor IX

Art Unit: 1649

binding to the complex is inhibited. The claims of the '528 application do not teach the administration of the claimed antibodies for the purpose of treating septic shock syndrome. Taylor teaches that treatment with anti TF antibody in a primate model for septic shock syndrome attenuated response to otherwise lethal *E. coli* injection (see esp. middle column and right column). It would have been obvious to the person of ordinary skill in the art at the time the invention was made to modify the claims of '528 application by adding a limitation for treating septic shock syndrome, as taught in Taylor because of the success Taylor reported in the treatment of septic shock. The person of ordinary skill in the art would have been motivated to combine the teachings and could have expected success for the same reason. Furthermore, since the antibodies recited in the '528 application are the same as those recited in the instant application, it would be expected that they would be capable of acting in the same way to treat septic shock syndrome.

This is a provisional obviousness-type double patenting rejection.

Claims 37, 47, 49, 50 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 66 of copending Application No. 11/122,622 in view of Taylor (cited above). The claims of the instant application is drawn to a method for treating septic shock syndrome in a mammal, the method comprising administering to the mammal an effective amount of an humanized antibody or fragment thereof with human variable regions that binds native human tissue factor and does not substantially bind non-native tissue factor, wherein the Factor

Art Unit: 1649

X or Factor IX binding to the complex is inhibited and the administration is sufficient to prevent or treat the septic shock syndrome in the mammal. The claim of the '622 application is drawn to methods of administering to the mammal an effective amount of a humanized antibody or fragment thereof wherein the antibody binds specifically to human tissue factor to form a complex, and further wherein factor X or Factor IX binding to TF is inhibited (followed by a detailed recitation of structure). The claims of the '622 application do not teach the administration of the claimed antibodies for the purpose of treating septic shock syndrome. Taylor teaches that treatment with anti TF antibody in a primate model for septic shock syndrome attenuated response to otherwise lethal *E. coli* injection (see esp. middle column and right column). It would have been obvious to the person of ordinary skill in the art at the time the invention was made to modify the claims of '622 application by adding a limitation for treating septic shock syndrome, as taught in Taylor because of the success Taylor reported in the treatment of septic shock. The person of ordinary skill in the art would have been motivated to combine the teachings and could have expected success for the same reason. Furthermore, since the antibodies recited in the '622 application are the same as those recited in the instant application, it would be expected that they would be capable of acting in the same way to treat septic shock syndrome.

This is a provisional obviousness-type double patenting rejection.

Claims 37, 38, 39, 40, 42, 47, 50 and 51 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4

and 10-12 of copending Application No. 11/311,702 in view of Taylor (cited above). The instant claims are drawn to a method for treating or preventing septic shock syndrome in a mammal, the method comprising administering to the mammal an effective amount of a monoclonal antibody that binds native human tissue factor and does not substantially bind non-native tissue factor, wherein the Factor X or Factor IX binding to the complex is inhibited and the administration is sufficient to prevent or treat the septic shock syndrome in the mammal, wherein the antibody has the binding specificity for native human tissue factor about equal to or greater than H36.D2.B7 [ATCC HB-12255], and wherein the antibody is a chimeric antibody, a humanized antibody, a single chain antibody and/or an immunologically active antibody fragment, wherein the fragment is a Fab, F(v), Fab' or F(ab)₂ fragment. The claims of the '702 application are also drawn to methods of administering to the mammal an effective amount of a monoclonal antibody that binds native human tissue factor and does not substantially bind non-native tissue factor, wherein the Factor X or Factor IX binding to the complex is inhibited and the administration is sufficient to prevent or treat the septic shock syndrome in the mammal, wherein the antibody has the binding specificity for native human tissue factor about equal to or greater than H36.D2.B7 [ATCC HB-12255], and wherein the antibody is a chimeric antibody, a humanized antibody, a single chain antibody and/or an immunologically active antibody fragment, wherein the fragment is a Fab, F(v), Fab' or F(ab)₂ fragment. The claims of the '702 application do not teach the administration of the claimed antibodies for the purpose of treating septic shock syndrome. Taylor teaches treatment with anti TF antibody in a primate model for septic shock syndrome

Art Unit: 1649

attenuated response to otherwise lethal *E. coli* injection (see esp. middle column and right column). It would have been obvious to the person of ordinary skill in the art at the time the invention was made to modify the claims of '702 application by adding a limitation for treating septic shock syndrome, as taught in Taylor because of the success Taylor reported in the treatment of septic shock. The person of ordinary skill in the art would have been motivated to combine the teachings and could have expected success for the same reason. Furthermore, since the antibodies recited in the '702 application are the same as those recited in the instant application, it would be expected that they would be capable of acting in the same way to treat septic shock syndrome.

This is a provisional obviousness-type double patenting rejection.

Claims 37 and 40 are also provisionally rejected on the ground of nonstatutory double patenting over claims 21, 23, 24, 29 and 30 of copending Application No. 11/311,702. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows: a method for treating septic shock syndrome in a mammal, the method comprising administering to the mammal an effective amount of a humanized or chimeric antibody that binds native human tissue factor and does not substantially bind non-native tissue factor, wherein the Factor X or

Art Unit: 1649

Factor IX binding to the complex is inhibited and the administration is sufficient to prevent or treat the septic shock syndrome in the mammal.

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Conclusion

No claims is allowed.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Even if the Applicants could claim priority back to 1997, many of the claims would be obviated by Edgington (US Patent No. 5,223,427, cited on Applicants' 1449 form) over Taylor (cited above). Edgington discloses antibodies that specifically bind TF and inhibit the formation of Factor X. As stated above, Taylor teaches treatment with anti TF antibody in a primate model for septic shock syndrome attenuated response to otherwise lethal *E. coli* injection (see esp. middle column and right column)

Art Unit: 1649

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christina Borgeest whose telephone number is 571-272-4482. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Andres can be reached on 571-272-0867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christina Borgeest, Ph.D.



ELIZABETH KEMMERER
PRIMARY EXAMINER